

IN THE CLAIMS:

1-65. (canceled)

16. (previously presented) An *H. pylori* bacterial strain, or an extract of an *H. pylori* bacterial strain, wherein the *H. pylori* bacterial strain has an aflagellate phenotype resulting from a mutation in the *fbaA* gene of the *H. pylori* bacterial strain.

17. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 16, wherein the *fbaA* gene is able to hybridize, under conditions of stringency, with a probe corresponding to a nucleotide fragment from *H. pylori*, which has been amplified using two oligonucleotides having the following sequences:

OLF1bA-1: ATGCCTCGAGGTGCAAAGCAAGATG (SEQ ID NO:1),

OLF1bA-2: GAAATCTTCATACTGGCAGCTCCAGTC (SEQ ID NO:2).

18. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 16, wherein the *fbaA* gene comprises SEQ ID NO: 6.

19. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 16, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.

30. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim *60*, wherein the *H. pylori* bacterial strain also lacks the flagellum sheath.

31. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim *60*, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.

32. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim *60*, wherein the *H. pylori* bacterial strain is obtained from strain N6 having deposit Accession No. NCIMB 40512.

33. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim *60*, wherein the *H. pylori* bacterial strain is strain N6fbA⁻ having deposit Accession No. NCIMB 40747.

34. (previously presented) The extract of an *H. pylori* bacterial strain according to claim *60*, wherein the bacterial extract is a total bacterial extract.

35. (previously presented) The extract of an *H. pylori* bacterial strain according to claim *60*, wherein the bacterial extract is a n-octyl glucoside extract.

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11. 26. (previously presented) The extract of an *H. pylori* bacterial strain according to claim 66, wherein the bacterial extract is obtained after extracting with PBS or glycine.

12. 27. (previously presented) An *H. pylori* bacterial strain, or an extract of an *H. pylori* bacterial strain, wherein the *H. pylori* bacterial strain has an aflagellate phenotype resulting from a mutation in the *fliA* gene of the *H. pylori* bacterial strain, and wherein the *H. pylori* bacterial strain does not express the FlaA and FlaB proteins.

13. 28. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 27, wherein the *fliA* gene is able to hybridize, under conditions of stringency, with a probe corresponding to a nucleotide fragment from *H. pylori*, which has been amplified using two oligonucleotides having the following sequences:

OLF1bA-1: ATGCCTCGAGGTCGAAAAGCAAGATG (SEQ ID NO:1),

OLF1bA-2: GAAATCTCATCTGGCAGCTCCAGTC (SEQ ID NO:2).

14. 29. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 27, wherein the *fliA* gene comprises SEQ ID NO: 6.

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16. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 17, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.

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18. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 17, wherein the *H. pylori* bacterial strain also lacks the flagellum sheath.

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20. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 17, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.

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22. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 17, wherein the *H. pylori* bacterial strain is obtained from strain N6 having deposit Accession No. NCIMB 40512.

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24. (previously presented) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 17, wherein the *H. pylori* bacterial strain is strain N6fbA^{*} having deposit Accession No. NCIMB 40747.

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26. (previously presented) The extract of an *H. pylori* bacterial strain according to claim 17, wherein the bacterial extract is a total bacterial extract.

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86. (previously presented) The extract of an *H. pylori* bacterial strain
according to claim 27, wherein the bacterial extract is a n-octyl glucoside extract.

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87. (previously presented) The extract of an *H. pylori* bacterial strain
according to claim 27, wherein the bacterial extract is obtained after extracting with PBS
or glycine.

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